



# POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 239

SEPTEMBER 22, 1961

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### SPECIAL NOTE

This report is intended for the information and administrative use of those involved in the investigation and control of poliomyelitis and polio-like diseases. It presents a summary of provisional information reported to CDC from State Health Departments, Virology Laboratories, Epidemic Intelligence Service Officers, and other pertinent sources. Since much of the information is preliminary in nature, confirmation and final interpretation should be determined in consultation with the original investigators prior to any further use of the material.

## SUMMARY

A marked increase in total and paralytic case reporting was evident during the 37th week ending September 16, with telegraphic reports of 98 cases, 62 paralytic.

Cases continue to occur in the tri-county outbreak in Upstate New York. Reports from New York and Wisconsin are included in Section 2.

A report from the West German Health Office has been received, and details of the increased incidence noted this year in West Germany are presented in Section 5.

### 1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

Telegraphic reports for the 37th week, ending September 16, 1961, showed a marked increase in cases over the previous two weeks. A total of 98 cases, 62 paralytic, was reported as compared to 62 cases, 37 paralytic, reported last week. The corresponding week in 1960 brought a report of 176 total cases, 114 paralytic.

The cumulative total for polio noted during the last six weeks for this year is shown in the table below, with comparative figures for the preceding four years. Despite the current weekly increase, the seasonal figures remain far below those of previous years.

Six Week Totals (32nd through 37th week) for Past Five Years

	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>
Paralytic	275	632	1855	839	489
Total	415	960	3023	1746	1877

The report from New York, 46 cases, 27 paralytic, has again accounted for the largest part of the weekly total. Only three other States reported more than three cases -- California (5), Mississippi (4), and Texas (4). No epidemic foci have been noted outside of Upper New York State.

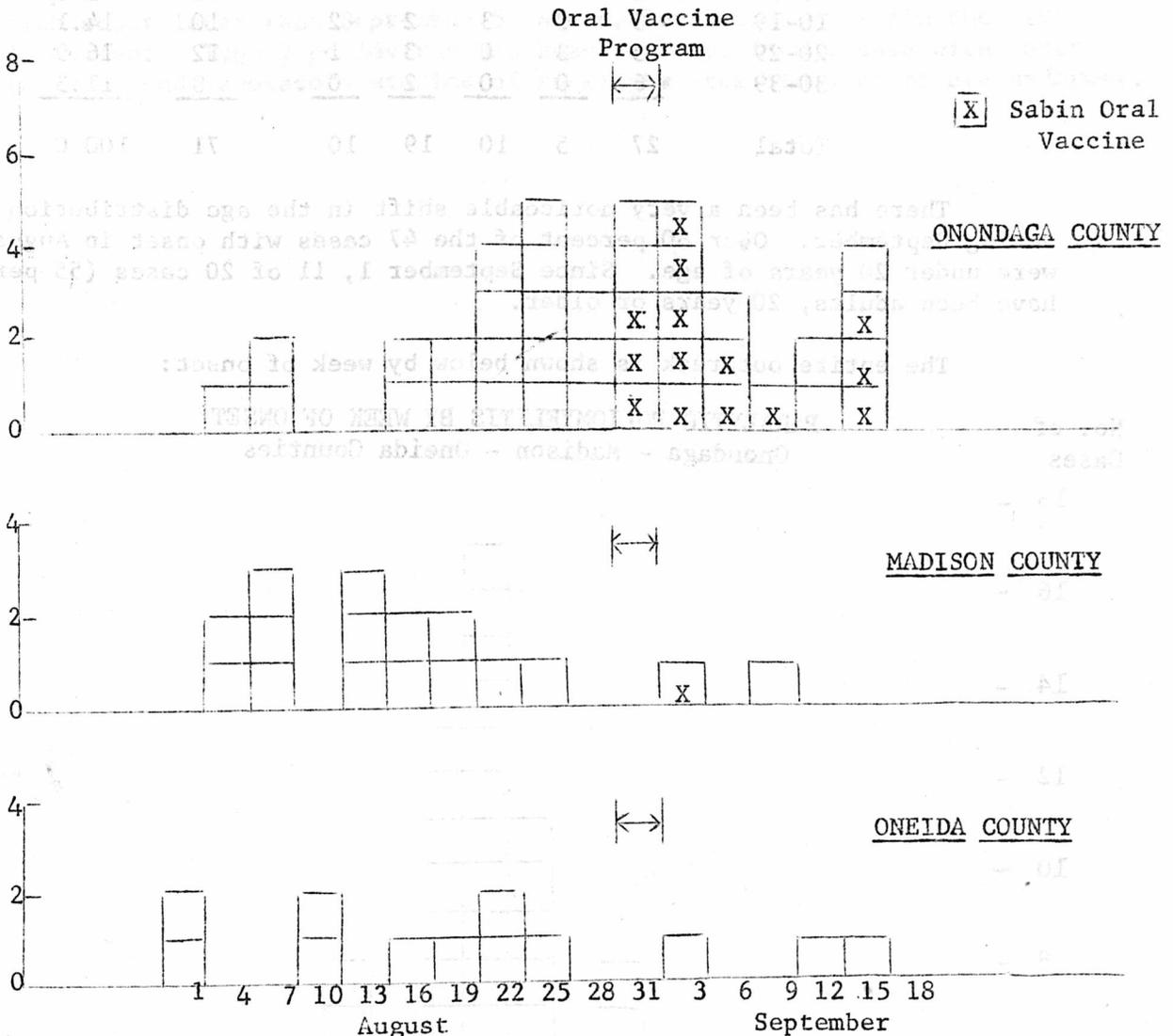
### 2. REPORTS

#### A. New York State

Poliomyelitis continues to occur in Onondaga, Madison and Oneida Counties. Dr. Robert M. Albrecht, Director, Office of Epidemiology, New York State Department of Health, reports 11 additional paralytic cases in the tri-county area. Through Wednesday, September 20, 71 cases of paralytic poliomyelitis have occurred in these three counties. Of the 71 cases, 41 have occurred in Onondaga County (28 in Syracuse), 17 in Madison County and 13 in Oneida County. Type I poliovirus has been isolated from 13 cases.

Twenty-five cases have occurred since the oral immunization program on August 23-31. The epidemic curve is shown below for each county by date of onset in three-day periods. Eighteen of the 25 cases which occurred subsequent to the oral program received oral vaccine and are depicted by an "X" in the histogram. Seventeen of the 18 cases occurred in more populous Onondaga County where cases continue to occur.

PARALYTIC POLIOMYELITIS BY DATE OF ONSET  
ONONDAGA-MADISON-ONEIDA COUNTIES



The histogram includes the 67 paralytic cases with onset since August 1. The 21 cases since August 29 are shown below in relation to the oral vaccine program.

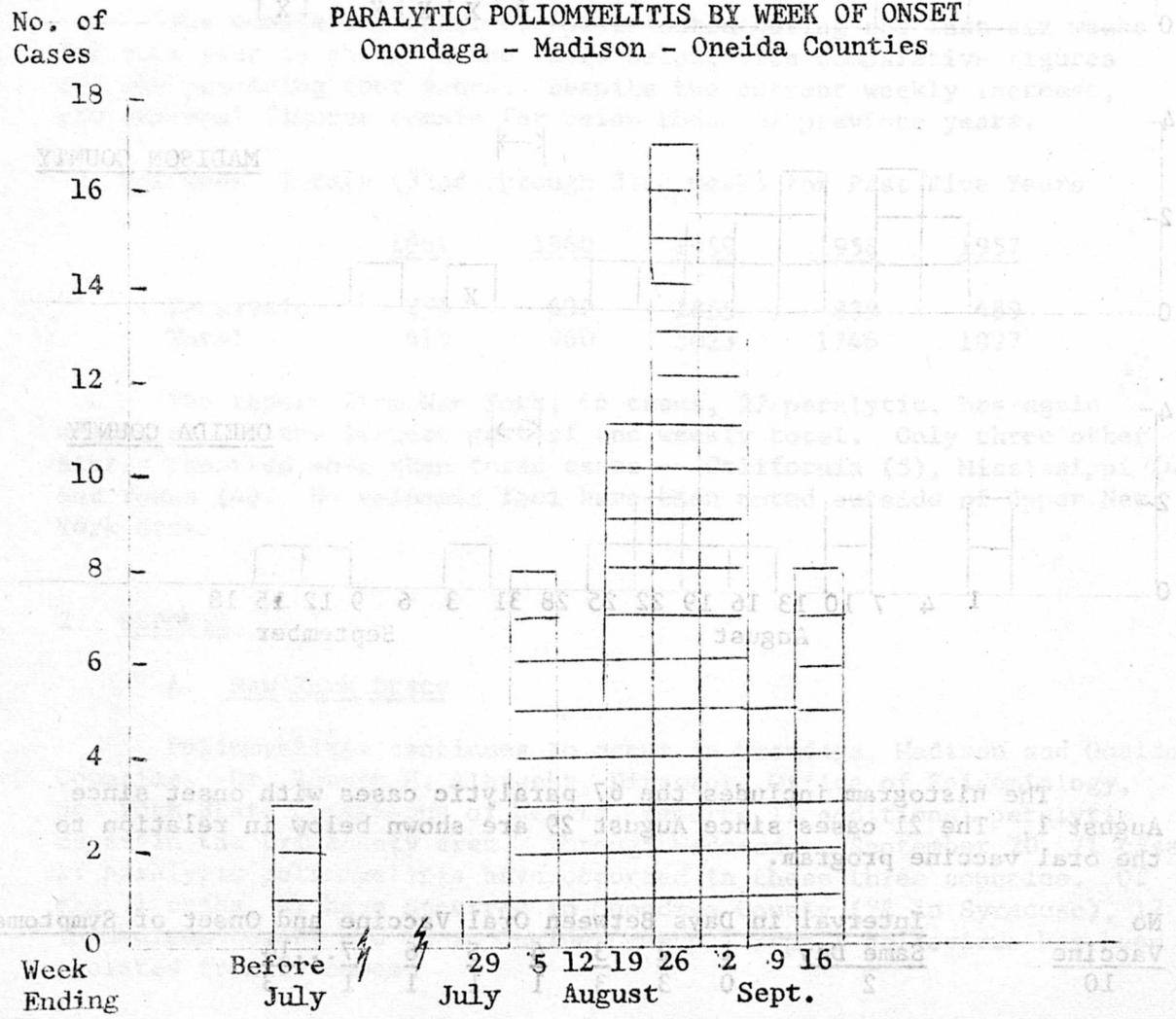
No Vaccine	Interval in Days Between Oral Vaccine and Onset of Symptoms									
	Same Day	1	2	3	4	5	6	7...	14	
10	2	0	3	3	1	1	1	1	3	

In addition to the 71 paralytic cases, there are ten nonparalytic cases in Onondaga County, six in Oneida County and two in Madison County. There have been three deaths. The age and vaccination history of the 71 paralytic cases are shown in the following table:

Age Group	Vaccination History					Total	%
	0	1	2	3	4+		
0-4	12	2	4	8	4	30	42.3
5-9	1	0	3	4	3	11	15.5
10-19	3	0	3	2	2	10	14.1
20-29	5	3	0	3	1	12	16.9
30-39	6	0	0	2	0	8	11.3
<b>Total</b>	<b>27</b>	<b>5</b>	<b>10</b>	<b>19</b>	<b>10</b>	<b>71</b>	<b>100.0</b>

There has been a very noticeable shift in the age distribution during September. Over 80 percent of the 47 cases with onset in August were under 20 years of age. Since September 1, 11 of 20 cases (55 percent) have been adults, 20 years or older.

The entire outbreak is shown below by week of onset:



B. Wisconsin

The three cases reported this week from Wisconsin are all from the city of Milwaukee. According to Dr. Josef Preizler, Epidemiologist, Wisconsin State Board of Health, the 1961 total reported from Milwaukee now stands at seven cases, all paralytic. Field investigation is still in progress on some of the most recent cases; no case has been reported with onset later than September 5, and no localization within the city is evident. Type I poliovirus has been isolated from a case with onset in June, and laboratory studies of specimens from other cases are underway.

TABLE 3  
POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP, AND VACCINATION STATUS REPORTED ON POLIOMYELITIS SURVEILLANCE FORMS (through September 18, 1961)

Age Group	Paralytic					TOTAL
	0	1	2	3	4+	
0-4	101	15	18	18	16	174
5-9	24	6	7	18	20	75
10-14	16	3	5	12	12	48
15-19	8	0	2	3	1	14
20-29	26	0	3	2	1	32
30-39	18	2	1	0	0	21
40+	13	0	1	0	2	16
TOTAL	206	28	40	60	52	409

Age Group	Nonparalytic					TOTAL
	0	1	2	3	4+	
0-4	15	0	2	2	1	20
5-9	0	0	1	2	1	4
10-14	0	3	3	6	7	19
15-19	1	0	1	4	4	10
20-29	0	0	1	2	2	5
30-39	2	0	0	1	1	4
40+	0	0	0	0	0	0
TOTAL	18	3	7	18	16	62

(This Surveillance Report was prepared by the Poliomyelitis and Polio-like Diseases Surveillance Unit, Michael J. Regan, M.D., Chief, James A. Bryan, II, M.D., and Mr. Leo Morris, Statistician, with the assistance of Statistics Section, CDC.)

3. 1961 POLIOMYELITIS CASES REPORTED TO PSU

Through September 16, there have been 536 cases of poliomyelitis with onset in 1961 submitted on individual case forms to the Poliomyelitis Surveillance Unit. Of these 536 cases, 409 (76 percent) are paralytic, 113 nonparalytic and 14 unspecified as to paralytic status.

These cases are presented in Table 3 by paralytic status, age group and vaccination history. Over 40 percent of the paralytic cases continue to occur among preschool children. A distinct difference in age distribution is evident between the paralytic and nonparalytic cases.

TABLE 3

POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP AND VACCINATION STATUS REPORTED ON PSU FORMS (Through September 16, 1961)

Age Group	Paralytic						TOTAL	Percent
	Doses of Vaccine							
	0	1	2	3	4+	Unk		
0-4	101	15	16	18	16	8	174	42.5
5-9	24	6	7	18	20	4	79	19.3
10-14	16	2	5	12	14	2	51	12.5
15-19	8	0	5	5	3	1	22	5.4
20-29	26	0	3	6	2	1	38	9.3
30-39	18	5	1	0	2	3	29	7.1
40+	13	0	0	1	0	2	16	3.9
<b>TOTAL</b>	<b>206</b>	<b>28</b>	<b>37</b>	<b>60</b>	<b>57</b>	<b>21</b>	<b>409</b>	<b>100.0</b>
<b>PERCENT DOSES</b>	<b>53.1</b>	<b>7.2</b>	<b>9.5</b>	<b>15.5</b>	<b>14.7</b>	<b>-</b>	<b>100.0</b>	

Age Group	Nonparalytic						TOTAL	Percent
	Doses of Vaccine							
	0	1	2	3	4+	Unk		
0-4	11	0	5	6	1	1	24	21.2
5-9	5	0	1	9	10	3	28	24.8
10-14	0	3	3	6	7	4	23	20.4
15-19	1	0	2	3	4	0	10	8.8
20-29	6	0	1	5	4	2	18	15.9
30-39	5	0	0	2	0	1	8	7.1
40+	0	0	0	0	2	0	2	1.8
<b>TOTAL</b>	<b>28</b>	<b>3</b>	<b>12</b>	<b>31</b>	<b>28</b>	<b>11</b>	<b>113</b>	<b>100.0</b>
<b>PERCENT DOSES</b>	<b>27.5</b>	<b>2.9</b>	<b>11.8</b>	<b>30.4</b>	<b>27.5</b>	<b>-</b>	<b>100.0</b>	

#### 4. ROUTINE POLIOMYELITIS SURVEILLANCE

##### A. Cases With Onset Within 30 Days of Vaccination

Two cases of paralytic poliomyelitis with onset within 30 days of vaccination have been reported to the Poliomyelitis Surveillance Unit during the past week ending September 16. This brings the 1961 total to 11 cases, of which 10 are paralytic (two correlated).

One of the cases is a 32 year old male from Jackson County, Michigan, with onset on 6-9-61. He received an inoculation of vaccine on 5-13-61 in the right arm and suffered weakness in both legs and the right arm. At 60 days following onset, this patient had minor residual paralysis.

The second case is a seven-month old male from Monroe County, New York, who received his third dose of vaccine on 8-18-61 and had onset of symptoms on 9-1-61. The manufacturer and lot number of the vaccines used are being investigated as part of routine poliomyelitis surveillance.

##### B. Vaccine Distribution

A summary of current and cumulative shipments of poliomyelitis single and multiple antigen vaccines through August, 1961, is presented in Table II. Also included in this report are the monthly shipments of vaccine since January, 1959, which are presented in Figure II.

#### 5. FOREIGN REPORTS -- West Germany

A considerable increase in total and paralytic case reports has been evident this year in West Germany. Through August 23, a total of 2,016 cases, 1,519 paralytic, has been reported to the Federal Health Office. At this same time in 1960, the figures stood at only 1,089 cases, 852 paralytic.

According to Dr. Werner Anders, Epidemiologist, West German Department of Health, a total of 769 cases has been reported from the State of Nordrhein-Westfalen, adjacent to Belgium and the Netherlands. Baden-Wuerttemberg, with 418 cases, has also accounted for a sizeable portion of the total morbidity.

The following table summarizes State reports through August 23. The eleven German States are listed in geographic order from north to south. Although Nordrhein-Westfalen has accounted for over one-third of total reports, higher attack rates are evident in less populous Bremen, Saarland, and Baden-Wuerttemberg.

State	Population* (000's)	Cumulative Reports	Attack Rate (per 100,000)
Schleswig-Holstein	2,271	29	1.3
Hamburg	1,792	13	0.7
Niedersachsen	6,541	152	2.3
Bremen	648	89	13.7
Nordrhein-Westfalen	14,989	769	5.1
Hessen	4,603	112	2.4
Rheinland-Pfalz	3,324	98	2.9
Baden-Wuerttemberg	7,232	418	5.8
Bayern	9,191	234	2.5
Saarland	1,000	100	10.0
West-Berlin	2,223	2	0.1
<b>TOTAL</b>	<b>53,814</b>	<b>2,016</b>	<b>3.7</b>

\* 1956 Estimates

Within Nordrhein-Westfalen the areas including Duesseldorf, Aachen, and Arnsberg have contributed the majority of cases. The table below summarizes cumulative reporting through August 23 within this State as compared to similar reports in 1960:

Area	1961	1960
	Total	Total
Duesseldorf	221	51
Koeln	61	75
Aachen	176	5
Muenster	74	8
Detwold	59	25
Arnsberg	178	25
<b>TOTAL</b>	<b>769</b>	<b>189</b>

The following table summarizes State reports through August 23. The eleven German States are listed in geographic order from north to south. Although Nordrhein-Westfalen has accounted for over one-third of total reports, higher attack rates are evident in less populous Bremen, Saarland, and Baden-Wuerttemberg.

FIGURE 1

# CURRENT U.S. POLIO INCIDENCE COMPARED WITH YEARS 1955 -1960, April - December, by week

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS  
AND COMMUNICABLE DISEASE CENTER

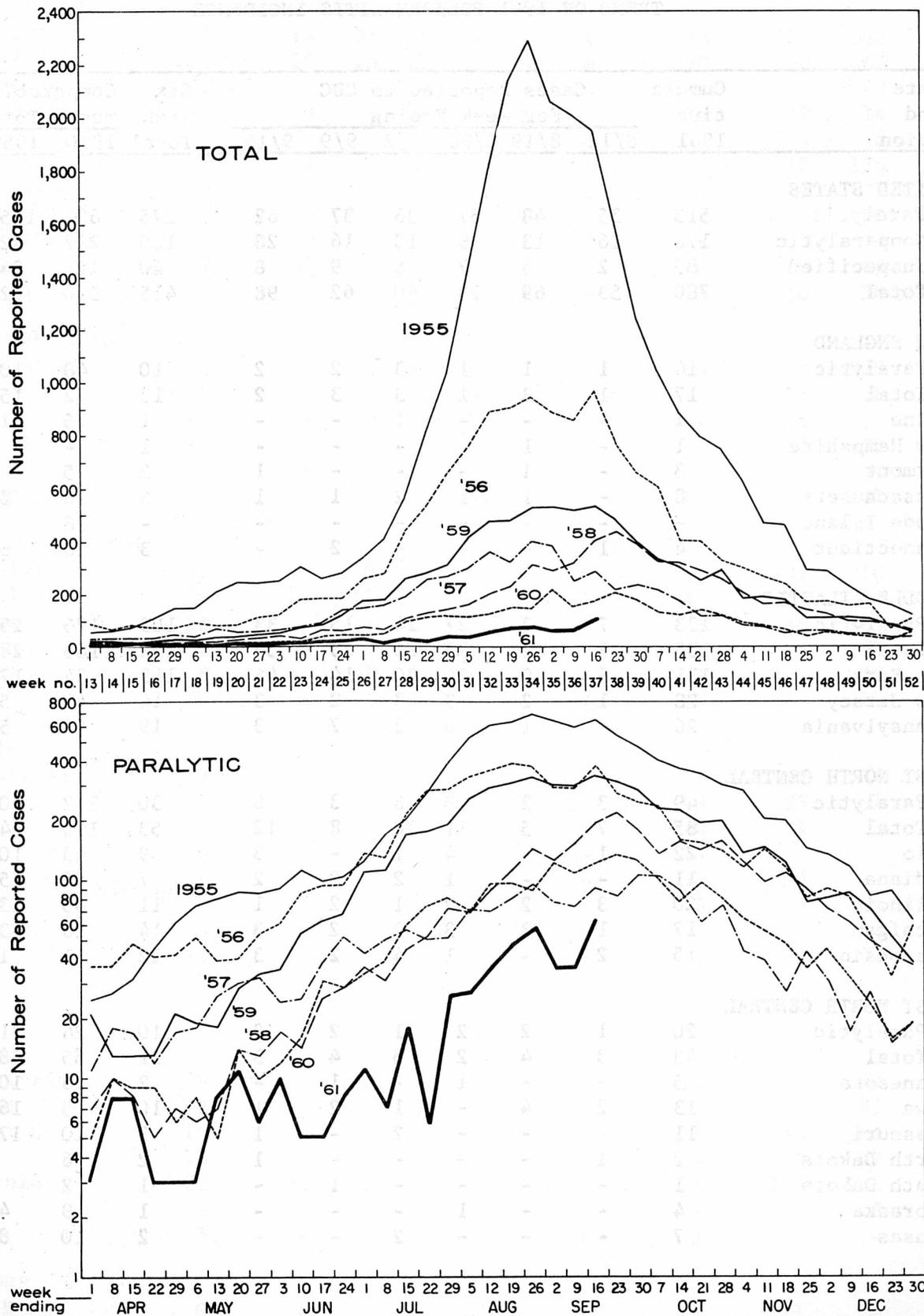


Table 1

## TREND OF 1961 POLIOMYELITIS INCIDENCE

State and Region	Cumulative 1961	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		8/12	8/19	8/26	9/2	9/9	9/16		1960	1959	1958
<b>UNITED STATES</b>											
Paralytic	513	35	48	57	36	37	62	275	632	1855	839
Nonparalytic	178	16	13	9	18	16	28	100	217	927	669
Unspecified	89	2	8	7	6	9	8	40	111	241	238
Total	780	53	69	73	60	62	98	415	960	3023	1746
<b>NEW ENGLAND</b>											
Paralytic	14	1	1	1	3	2	2	10	48	109	17
Total	17	1	3	1	3	3	2	13	72	159	43
Maine	1	-	-	-	1	-	-	1	15	13	-
New Hampshire	1	-	1	-	-	-	-	1	-	3	4
Vermont	3	-	1	-	-	-	1	2	5	1	3
Massachusetts	8	-	1	1	2	1	1	6	16	80	16
Rhode Island	-	-	-	-	-	-	-	-	18	2	2
Connecticut	4	1	-	-	-	2	-	3	18	60	18
<b>MIDDLE ATLANTIC</b>											
Paralytic	133	7	7	27	14	15	33	103	126	156	153
Total	185	7	12	33	25	23	52	152	165	286	274
New York	131	6	9	24	20	14	46	119	84	171	104
New Jersey	28	1	2	3	3	2	3	14	41	59	130
Pennsylvania	26	-	1	6	2	7	3	19	40	56	40
<b>EAST NORTH CENTRAL</b>											
Paralytic	49	3	2	8	6	3	8	30	112	202	268
Total	85	7	5	11	10	8	12	53	193	543	701
Ohio	22	1	-	4	1	-	3	9	43	104	125
Indiana	11	-	-	1	2	2	2	7	50	56	48
Illinois	20	3	2	2	1	2	1	11	63	136	83
Michigan	17	1	3	3	2	2	3	14	26	231	425
Wisconsin	15	2	-	1	4	2	3	12	11	16	20
<b>WEST NORTH CENTRAL</b>											
Paralytic	20	1	2	2	1	2	2	10	26	310	58
Total	43	3	4	2	5	4	3	21	55	588	127
Minnesota	5	-	-	1	-	1	-	2	13	106	12
Iowa	13	2	4	-	1	2	1	10	5	160	34
Missouri	11	-	-	-	2	-	1	3	10	175	43
North Dakota	2	1	-	-	-	-	1	2	6	9	21
South Dakota	1	-	-	-	-	1	-	1	2	7	-
Nebraska	4	-	-	1	-	-	-	1	9	43	6
Kansas	7	-	-	-	2	-	-	2	10	88	11

Table 1 (Continued)

State and Region	Cumulative 1961	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		8/12	8/19	8/26	9/2	9/9	9/16		1960	1959	1958
<b>SOUTH ATLANTIC</b>											
Paralytic	101	14	21	8	-	6	4	53	115	362	114
Total	137	17	23	11	3	8	8	70	154	464	210
Delaware	2	-	-	-	-	-	-	-	-	3	11
Maryland	23	3	6	4	-	1	1	15	32	14	6
D.C.	1	-	-	-	-	-	-	-	-	6	-
Virginia	9	4	2	-	-	-	1	7	12	126	43
West Virginia	18	4	-	3	-	3	1	11	16	91	62
North Carolina	13	-	1	-	3	-	2	6	32	90	31
South Carolina	15	1	2	1	-	1	3	8	43	33	5
Georgia	27	3	3	2	-	-	-	8	9	65	16
Florida	29	2	9	1	-	3	-	15	10	36	36
<b>EAST SOUTH CENTRAL</b>											
Paralytic	37	-	3	1	9	1	5	19	24	229	37
Total	61	-	4	2	9	3	7	25	77	326	92
Kentucky	22	-	-	1	1	-	2	4	48	19	7
Tennessee	13	-	2	-	-	3	-	5	17	172	38
Alabama	9	-	1	-	2	-	1	4	3	104	15
Mississippi	17	-	1	1	6	-	4	12	9	31	32
<b>WEST SOUTH CENTRAL</b>											
Paralytic	57	4	8	5	2	3	3	25	37	210	115
Total	109	10	12	8	4	6	7	47	61	314	167
Arkansas	11	-	3	2	2	1	-	8	10	101	3
Louisiana	36	7	3	5	1	2	3	21	2	39	20
Oklahoma	3	-	1	-	-	-	-	1	4	46	13
Texas	59	3	5	1	1	3	4	17	45	128	131
<b>MOUNTAIN</b>											
Paralytic	23	1	2	1	-	-	-	4	7	33	19
Total	40	3	2	1	-	2	-	8	25	61	51
Montana	3	-	-	-	-	-	-	-	1	3	23
Idaho	13	2	1	-	-	1	-	4	1	-	6
Wyoming	-	-	-	-	-	-	-	-	14	-	2
Colorado	6	1	1	1	-	-	-	3	5	11	4
New Mexico	3	-	-	-	-	-	-	-	2	12	4
Arizona	7	-	-	-	-	-	-	-	1	27	8
Utah	8	-	-	-	-	1	-	1	1	6	3
Nevada	-	-	-	-	-	-	-	-	-	2	1
<b>PACIFIC</b>											
Paralytic	79	4	2	4	1	5	5	21	137	244	58
Total	103	5	4	4	1	5	7	26	158	282	81
Washington	19	1	-	2	1	1	1	6	12	84	5
Oregon	12	2	1	-	-	1	-	4	7	67	11
California	69	2	3	2	-	3	5	15	137	126	46
Alaska	-	-	-	-	-	-	-	-	-	5	-
Hawaii	3	-	-	-	-	-	1	1	2	-	19
<b>TERRITORY</b>											
Puerto Rico	6	-	-	-	-	-	1	1	71	-	7

Table II

THE NATIONAL FOUNDATION

MONTHLY REPORT OF POLIOMYELITIS VACCINE RELEASED AND SHIPPED

(1,000 cc's)

August, 1961

	<u>SINGLE ANTIGEN</u>		<u>MULTIPLE ANTIGEN</u>		<u>TOTAL</u>	
	<u>This Month</u>	<u>To Date</u>	<u>This Month</u>	<u>To Date</u>	<u>This Month</u>	<u>To Date</u>
CC. Released	4,471	499,878	0	15,507	4,471	515,385
CC. Shipped:						
National Foundation	1	14,261	-	-	1	14,261
Public Agencies	1,279	179,664	3	1,147	1,282	180,811
Commercial Channels	<u>2,508</u>	<u>181,500</u>	<u>8</u>	<u>13,313</u>	<u>2,516</u>	<u>194,813</u>
Domestic Total	3,788	375,425	11	14,460	3,799	389,885
Export	302	108,633	0	634	302	109,267

CC. UNSHIPPED, END OF MONTH\*

(1,000 cc's)

	<u>1960</u>	<u>1961</u>
January	19,459	14,755
February	20,965	15,737
March	27,062	13,414
April	27,216	10,887
May	24,846	6,448
June	24,620	6,558
July	23,830	4,233
August	24,525	4,599
September	23,091	
October	19,565	
November	16,319	
December	15,669	

\* Excludes outdated vaccine removed from inventory.

FIGURE II  
MONTHLY SHIPMENTS OF POLIOMYELITIS VACCINE; 1959-61

